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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :

TATSUYA TOMIOKA ET AL : ATTN: APPLICATION DIVISION

SERIAL NO: NEW U.S. PCT APPLN :  
(Based on PCT/JP01/03647)

FILED: HERewith :

FOR: POLYCARBONATE RESIN :  
FOR OPTICAL DISK SUBSTRATE  
AND OPTICAL DISK  
SUBSTRATE

PRELIMINARY AMENDMENT

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

SIR:

Prior to examination on the merits, please amend the above-identified application as follows:

IN THE CLAIMS

Please amend the claims as shown on the marked-up copy following this amendment to read as follows:

1. (Amended) A polycarbonate resin for an optical disk substrate, said substrate comprising from 100 to 500 ppm of a releasing agent,  
wherein said resin has a viscosity average molecular weight of from 10,000 to 17,000, an iron content of 0.2 ppm or less and a free total phenol content of 80 ppm or less.

2. (Amended) The polycarbonate resin for an optical disk substrate described in claim 1, wherein said resin has an acetone soluble content of 12% by mass or less.

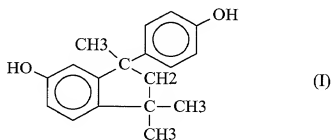
3. (Amended) The polycarbonate resin for an optical disk substrate described in claim 1, wherein said resin comprises from 150 to 350 ppm of a releasing agent.

4. (Amended) The polycarbonate resin for an optical disk substrate described in claim 1, wherein the releasing agent is a polyhydric alcohol fatty acid ester.

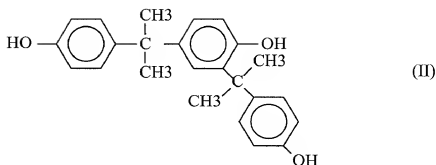
5. (Amended) An optical disk substrate comprising the polycarbonate resin for an optical disk substrate claimed in claim 1.

6. (Amended) A polycarbonate resin for an optical disk substrate, said substrate comprising 100 to 500 ppm of a releasing agent,

wherein said resin is obtained by polymerizing 2,2-(4-hydroxyphenyl)propane having a content of 2-(2-hydroxyphenyl)-2-(4-hydroxyphenyl)propane of 1,000 ppm or less, a content of a cyclic dimer of p-isopropenylphenol represented by the following formula (I) of 150 ppm or less:



and a content of a trisphenol compound represented by the following formula (II) of 150 ppm or less:



wherein said resin has a viscosity average molecular weight of from 10,000 to 17,000 and a fraction of hydroxyl end groups of less than 7% by mole.

7. (Amended) The polycarbonate resin for an optical disk substrate as described in claim 6, wherein said resin has a free total phenol content of 80 ppm or less.

8. (Amended) The polycarbonate resin for an optical disk substrate described in claim 6, wherein said resin comprises from 150 to 350 ppm of a releasing agent.

9. (Amended) The polycarbonate resin for an optical disk substrate described in claim 6, wherein the releasing agent is a polyhydric alcohol fatty acid ester.

10. (Amended) An optical disk substrate comprising the polycarbonate resin for an optical disk substrate described in claim 6.

11. (Amended) A polycarbonate resin for an optical disk substrate, said substrate comprising 100 to 500 ppm of a releasing agent,

wherein said resin satisfies the following conditions:

- (1) a viscosity average molecular weight is from 10,000 to 17,000,
- (2) an iron content is 0.2 ppm or less;

(3) when an intensity of a chemical shift  $\delta$  of from 7.0 to 7.5 ppm based on a phenyl ring in a spectrum measured with  $^1\text{H}$ -NMR is 1,000, a plurality of signal intensities at  $\delta$  of from 1.02 to 1.08 and from 6.69 to 6.73 are 0.01 or less.

12. (Amended) The polycarbonate resin for an optical disk substrate as described in claim 11, wherein said resin comprises from 150 to 350 ppm of a releasing agent.

13. (Amended) The polycarbonate resin for an optical disk substrate described in claim 11, wherein the releasing agent is a polyhydric alcohol fatty acid ester.

14. (Amended) The polycarbonate resin for an optical disk substrate described in claim 13, wherein the polyhydric alcohol fatty acid ester is a fatty acid monoester of glycerin.

15. (Amended) An optical disk substrate comprising the polycarbonate resin for an optical disk substrate described in claim 11.

16. (Amended) A polycarbonate resin for an optical disk substrate, said substrate comprising from 100 to 500 ppm of a releasing agent,  
wherein said resin has a viscosity average molecular weight of from 10,000 to 17,000, an iron content of 0.2 ppm or less and a fraction of hydroxyl end groups of less than 7% by mole.

17. (Amended) The polycarbonate resin for an optical disk substrate as described in claim 16, wherein said resin comprises from 150 to 350 ppm of a releasing agent.

18. (Amended) The polycarbonate resin for an optical disk substrate described in claim 16, wherein the releasing agent is a polyhydric alcohol fatty acid ester.

19. (Amended) The polycarbonate resin for an optical disk substrate described in claim 18, wherein the polyhydric alcohol fatty acid ester is a fatty acid monoester of glycerin.

20. (Amended) An optical disk substrate comprising the polycarbonate resin for an optical disk substrate described in claim 16.

REMARKS

Claims 1-20 are active in the present application. The claims have been amended to remove multiple dependencies and for clarity. No new matter is added. An action on the merits and allowance of claims is solicited.

Respectfully submitted,

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Serial No: \_\_\_\_\_

Amendment Filed on: \_\_\_\_\_

12-27-01IN THE CLAIMS

--1. (Amended) A polycarbonate resin for an optical disk substrate [characterized by having] said substrate comprising from 100 to 500 ppm of a releasing agent,

wherein said resin has a viscosity average molecular weight of from 10,000 to 17,000, an iron content of 0.2 ppm or less and a free total phenol content of 80 ppm or less[, and containing from 100 to 500 ppm of a releasing agent].

2. (Amended) [A] The polycarbonate resin for an optical disk substrate described in claim 1, [which] wherein said resin has an acetone soluble content of 12% by mass or less.

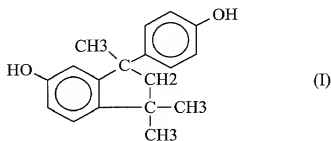
3. (Amended) [A] The polycarbonate resin for an optical disk substrate described in claim 1 [or 2, which contains] , wherein said resin comprises from 150 to 350 ppm of a releasing agent.

4. (Amended) [A] The polycarbonate resin for an optical disk substrate described in [any of claims 1 to 3] claim 1, wherein the releasing agent is a polyhydric alcohol fatty acid ester.

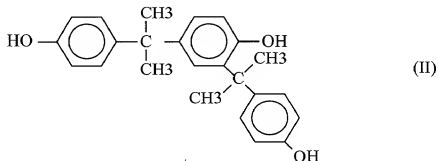
5. (Amended) An optical disk substrate comprising [a] the polycarbonate resin for an optical disk substrate [described in any of claims 1 to 4] claimed in claim 1.

6. (Amended) A polycarbonate resin for an optical disk substrate [characterized by being produced with, as a raw material,] , said substrate comprising 100 to 500 ppm of a releasing agent,

wherein said resin is obtained by polymerizing 2,2-(4-hydroxyphenyl)propane having a content of 2-(2-hydroxyphenyl)-2-(4-hydroxyphenyl)propane of 1,000 ppm or less, a content of a cyclic dimer of p-isopropenylphenol represented by the following [general] formula (I) of 150 ppm or less:



and a content of a trisphenol compound represented by the following [general] formula (II) of 150 ppm or less:



[having] wherein said resin has a viscosity average molecular weight of from 10,000 to 17,000 and a fraction of hydroxyl end groups of less than 7% by mole[, and containing from 100 to 500 ppm of a releasing agent].

7. (Amended) [A] The polycarbonate resin for an optical disk substrate as described in claim 6, [which] wherein said resin has a free total phenol content of 80 ppm or less.

8. (Amended) [A] The polycarbonate resin for an optical disk substrate described in claim 6 [or 7, which contains], wherein said resin comprises from 150 to 350 ppm of a releasing agent.

9. (Amended) [A] The polycarbonate resin for an optical disk substrate described in [any of claims 6 to 8] claim 6, wherein the releasing agent is a polyhydric alcohol fatty acid ester.

10. (Amended) An optical disk substrate comprising [a] the polycarbonate resin for an optical disk substrate described in [any of claims 6 to 9] claim 6.

11. (Amended) A polycarbonate resin for an optical disk substrate [characterized by satisfying] , said substrate comprising 100 to 500 ppm at a releasing agent, wherein said resin satisfies the following conditions:

- (1) a viscosity average molecular weight is from 10,000 to 17,000,
- (2) an iron content is 0.2 ppm or less;
- (3) when an intensity of a chemical shift  $\delta$  of from 7.0 to 7.5 ppm based on a phenyl ring in a spectrum measured with  $^1\text{H-NMR}$  is 1,000, a plurality of signal intensities at  $\delta$  of from 1.02 to 1.08 and from 6.69 to 6.73 are 0.01 or less; and
- (4) from 100 to 500 ppm of a releasing agent is contained].

12. (Amended) [A] The polycarbonate resin for an optical disk substrate as described in claim 11, [which contains] wherein said resin comprises from 150 to 350 ppm of a releasing agent.

13. (Amended) [A] The polycarbonate resin for an optical disk substrate described in claim 11 [or 12], wherein the releasing agent is a polyhydric alcohol fatty acid ester.

14. (Amended) [A] The polycarbonate resin for an optical disk substrate described in claim 13, wherein the polyhydric alcohol fatty acid ester is a fatty acid monoester of glycerin.



15. (Amended) An optical disk substrate comprising [a] the polycarbonate resin for an optical disk substrate described in [any of claims 11 to 14] claim 11.

16. (Amended) A polycarbonate resin for an optical disk substrate [characterized by having] , said substrate comprising from 100 to 500 ppm of a releasing agent,  
wherein said resin has a viscosity average molecular weight of from 10,000 to 17,000, an iron content of 0.2 ppm or less and a fraction of hydroxyl end groups of less than 7% by mole[, and containing from 100 to 500 ppm of a releasing agent].

17. (Amended) [A] The polycarbonate resin for an optical disk substrate as described in claim 16, [which contains] wherein said resin comprises from 150 to 350 ppm of a releasing agent.

18. (Amended) [A] The polycarbonate resin for an optical disk substrate described in claim 16 [or 17], wherein the releasing agent is a polyhydric alcohol fatty acid ester.

19. (Amended) [A] The polycarbonate resin for an optical disk substrate described in claim 18, wherein the polyhydric alcohol fatty acid ester is a fatty acid monoester of glycerin.

20. (Amended) An optical disk substrate comprising [a] the polycarbonate resin for an optical disk substrate described in [any of claims 16 to 19] claim 16.--